

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/GB2004/003059

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC 7	C07K16/24	A61K39/395	C12N15/13	A61P11/06	A61P35/00
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According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, Sequence Search, BIOSIS, EMBASE, CHEM ABS Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>WO 03/035847 A (CENTOCOR INC)  1 May 2003 (2003-05-01)  abstract  page 2, lines 9-33  page 3, lines 1-35  page 4, lines 12-36  page 7, lines 12-17  page 8, line 6 - page 10, line 23  page 12, lines 1-16  page 14, line 25 - page 15, line 25  page 16, line 12 - page 20, line 11  page 68, line 29 - page 69, line 21</p> <p style="text-align: center;">-----</p> <p style="text-align: center;">-/--</p>	1-34, 39-91

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

\* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the International filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the International filing date but later than the priority date claimed

- \*T\* later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the international search

24 February 2005

Date of mailing of the international search report

15.03.05

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax (+31-70) 340-3016

Authorized officer

Montrone, M

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, Y	WO 03/086451 A (CENTOCOR INC) 23 October 2003 (2003-10-23) abstract page 4, lines 9-29 page 5, line 3 - page 6, line 13 page 10, lines 15-32 page 56, line 1 - page 57, line 32 ----- Y WO 01/62933 A (PANTELIDIS PANAGIOTIS ; ROYAL BROMPTON AND HAREFIELD N (GB)) 30 August 2001 (2001-08-30) abstract page 2, line 22 - page 3, line 20 page 11, lines 9-14 page 12, lines 10-14 page 13, lines 1-13 page 15, lines 23,24 page 49, line 4 - page 50, line 12 page 29, line 14 - page 41, line 19 ----- Y WO 94/04680 A (SCHERING CORP) 3 March 1994 (1994-03-03) abstract page 33, line 15 - page 34, line 15 page 41, line 4 - page 42, line 19 ----- Y BLEASE K ET AL: "Therapeutic effect of IL-13 immunoneutralization during chronic experimental fungal Asthma" JOURNAL OF IMMUNOLOGY, THE WILLIAMS AND WILKINS CO. BALTIMORE, US, vol. 166, 15 April 2001 (2001-04-15), pages 5219-5224, XP002966771 ISSN: 0022-1767 cited in the application abstract ----- Y US 5 969 108 A (BONNERT TIMOTHY PETER ET AL) 19 October 1999 (1999-10-19) abstract ----- Y MENDEZ M J ET AL: "FUNCTIONAL TRANSPLANT OF MEGABASE HUMAN IMMUNOGLOBULIN LOCI RECAPITULATES HUMAN ANTIBODY RESPONSE IN MICE" NATURE GENETICS, NEW YORK, NY, US, vol. 15, no. 2, 1 February 1997 (1997-02-01), pages 146-156, XP002067603 ISSN: 1061-4036 abstract -----	1-34, 39-91 1-35, 39-91 1-35, 39-91 1-35, 39-91 1-35, 39-91 1-35, 39-91 1-35, 39-91 1-35, 39-91

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	ZHU ZHOU ET AL: "Pulmonary expression of interleukin-13 causes inflammation, mucus hypersecretion, subepithelial fibrosis, physiologic abnormalities, and eotaxin production" JOURNAL OF CLINICAL INVESTIGATION, NEW YORK, NY, US, vol. 103, no. 6, March 1999 (1999-03), pages 779-788, XP002176474 ISSN: 0021-9738 abstract page 780, column 1, paragraphs 2,3 -----	59-61, 89-91
Y	HEINZMANN A ET AL: "Genetic variants of IL-13 signalling and human asthma and atopy" HUMAN MOLECULAR GENETICS, OXFORD UNIVERSITY PRESS, SURREY, GB, vol. 9, no. 4, 1 March 2000 (2000-03-01), pages 549-559, XP002198872 ISSN: 0964-6906 abstract page 549, column 1, paragraph 1 - column 2, paragraph 1 page 550, column 1, paragraphs 2,3 page 553, column 2, paragraph 2 - page 554, column 2, paragraph 2 page 556, column 1, paragraph 4 - column 2, paragraph 1 -----	10, 59-61, 73,89-91
Y	WILLS-KARP M ET AL: "INTERLEUKIN-13: CENTRAL MEDIATOR OF ALLERGIC ASTHMA" SCIENCE, AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, US, vol. 282, 18 December 1998 (1998-12-18), pages 2258-2260, XP002948381 ISSN: 0036-8075 abstract page 2259, column 1, paragraph 2 - column 3, paragraph 1 page 2260, column 1, paragraph 2 - column 2, paragraph 3 -----	1-34, 39-91
Y	SKINNIDER BRIAN F ET AL: "Interleukin 13 and interleukin 13 receptor are frequently expressed by Hodgkin and Reed-Sternberg cells of Hodgkin lymphoma" BLOOD, vol. 97, no. 1, 1 January 2001 (2001-01-01), pages 250-255, XP002318728 ISSN: 0006-4971 abstract page 255, column 1, paragraph 2 - column 2, paragraph 1 -----	59-61, 89-91

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PCT/GB2004/003059

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>"Catalog" 'Online! 14 October 2002 (2002-10-14), R&amp;D SYSTEMS, INC. , MINNEAPOLIS, US , XP002318730</p> <p>Retrieved from the Internet: URL:<a href="http://www.rndsystems.com/asp/c_search.asp?ucategory=3&amp;factors=IL%2D13">http://www.rndsystems.com/asp/c_search.asp?ucategory=3&amp;factors=IL%2D13</a></p> <p>R&amp;D Systems, Inc. online catalog, catalog number MAB213, available since 14-10-2002. Technical product information.</p> <p>-----</p>	1-34, 39-91
P,Y	<p>"CATALOG" 'Online! 3 November 2003 (2003-11-03), R&amp;D SYSTEMS, INC. , MINNEAPOLIS, US , XP002318731</p> <p>Retrieved from the Internet: URL:<a href="http://www.rndsystems.com/asp/c_search.asp?ucategory=3&amp;factors=IL%2D13">http://www.rndsystems.com/asp/c_search.asp?ucategory=3&amp;factors=IL%2D13</a></p> <p>R&amp;D Systems, Inc. online catalog, catalog number MAB2131, available since 03-11-2003. Technical product information.</p> <p>-----</p>	1-34, 39-91
T	<p>"CATALOG" 'Online! 3 December 2004 (2004-12-03), R&amp;D SYSTEMS, INC. , MINNEAPOLIS, US , XP002318732</p> <p>Retrieved from the Internet: URL:<a href="http://www.rndsystems.com/asp/c_search.asp?ucategory=3&amp;factors=IL%2D13">http://www.rndsystems.com/asp/c_search.asp?ucategory=3&amp;factors=IL%2D13</a></p> <p>R&amp;D Systems, Inc. online catalog, catalog number MAB413, available since 03-12-2004. Technical product information.</p> <p>-----</p>	1-34, 39-91
Y	<p>KUPERMAN DOUGLAS A ET AL: "Direct effects of interleukin-13 on epithelial cells cause airway hyperreactivity and mucus overproduction in asthma" NATURE MEDICINE, vol. 8, no. 8, August 2002 (2002-08), pages 885-889, XP002318729 ISSN: 1078-8956 abstract page 885, column 2, paragraph 2 page 886, column 2, paragraph 2-4 page 887, column 1, paragraph 2</p> <p>-----</p>	59-61, 89-91

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## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.: 55, 56, 61, 85, 86 and 91 (all partially) because they relate to subject matter not required to be searched by this Authority, namely:  
Although claim 55, 56, 61, 85, 86 and 91 is directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound.
2.  Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3.  Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of Invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple Inventions in this International application, as follows:

see additional sheet

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.  As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:  
1-34, 39-91
4.  No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.  
 No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1: claims 1-12, 16, 18-34, 39, 41-91(all partially)

An isolated specific binding member for human IL-13 being comprised of CDR binding sites of BAK278D6, comprising one or two substitutions according to claims 1 to 6 and the general BAK278D6 sequences of claim 62.

Invention 2-54: claims 1-61(all partially)

An isolated specific binding member for human IL-13 being comprised of CDR binding sites of further antibodies being listed in table 1 being grouped according to their numbering, such as BAK0502, BAK1187, BAK1167, BAK1105, BAK1185, BAK1111, BAK1184, BAK1166, BAK1109, BAK1183, BAK1103, BAK1157, BAK1097 etc.

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No

PCT/GB2004/003059

Patent document cited in search report	Publication date	Patent family member(s)			Publication date
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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No

PCT/GB2004/003059

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